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AESIRACT

The need for preparing materials which are comprehensible to disadvantaged children led to this study in which verbs were simplified ir an effort to determine whether such simplification might increase the likelihcod cf passages being understood by disadvantaged black students. The hypcthesis was based on a 1927 study which fcund that 18 verbs, either alone or in combination, cculd be used to represent the meanings of all verbs used by average adults and by the considerable evidence available that differences in verb use exist between standard and nonstandard dialects. Twc grcups cf inner-city blacks and one of suburban whites, all ninth graders, were given two sets of cloze materials, one using simplified verbs and one using regular verbs. The group from Black School 1 (N=57) showed a significant difference ($p<.0005$) in ability tc supply simplified regular forms, the group from Black School 2 (N=51) showed similar significance, and the group from the white school (N=64) showed a significant difference but at a lower level ($p<.02$). It was concluded that verb simplification would be of greater help tc disadvantaged blacks than to whites. References and tables are included. (MS)

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THE EFFECT OF VERB SIMPLIFICATION ON THE READING COMPREHENSION OF CULTURALLY DIFFERENT HIGH SCHOOL STUDENTS

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Studies of language are usually concerned with phonology, syntax, and semantics. This study is concerned with one of these aspects, semantics, and is based on an early study in the field.

In the 1920's I. A. Richards and C. K. Ogden (1927) found that a small number of words could be used for defining the meanings of other words. They discovered that only eighteen verbs, when combined with prepositions, could represent the meanings of all the verbs used by the average college-educated adult. These eighteen verbs were: be, come, do, get, give, go, have, keep, let, make, may, put, say, see, seem, send, take, and will. For example, they found that give out can be used to express the central meaning of announce, bestow, grant, proclaim and many other verbs; give up can express the meanings in abandon, cease, desert, discontinue, forge, and the like.

Since verbs carry a considerable proportion of the vocabulary burden in most reading the simplification of the way verbs are expressed

would seemingly be desirable for some purposes. One possible purpose might be in the writing of instructural materials for poor readers. However, such a procedure would require answers to a number of questions. Does the use of such verbs actually lessen the comprehension burden for the reader? Although their application would require the recognition of a fewer number of words in reading, the concept load would still be present. In addition, the use of the simplified verbs would increase the number of prepositions and the length of sentences. Both factors are sometimes associated with increased reading difficulty (Bormuth, 1966).

What gives added status to this study is the finding of researchers that dialects of culturally different children often involve verb forms divergent from those of standard English. For example, DeStefano (in press) in studying fifth grade Black students' syntactic forms found that nonstandard verb forms account for the largest number of nonstandard syntactic forms. A study by Mattleman and Emans (1969), showed that Black students used more linking verbs and prepositional phrases than Puerto Rican students. Such findings are significant when it is considered that Loban (1963) determined that those using linking verb constructions were more proficient in language. Thus, the use of simplified verbs is an important consideration if used in materials specially prepared for students from culturally different sectors of the population. The need for developing procedures for writing materials for children displaying varied dialects is an especially acute one today. If techniques could be found which could aid readers of divergent dialects, but which are still expressed in standard English, the procedures would likely receive greater acceptance than those which use non-standard

English. The verb simplification of Ogden and Richards may be one such technique. Thus, this reasoning raises the following two questions:

1. Are materials written with simplified verbs easier for culturally different children to read than material written using regular verbs?
2. Are the advantages of materials written with simplified verbs greater for "culturally different" children than for other children?

Procedures

To find answers to the two questions two sets of materials, one using simplified verbs and the other using regular verbs, were given to three groups of ninth grade students, two groups of inner-city "culturally different" Black students, and one group of White suburban, "advantaged" children.

Ninth grade students were chosen as they are representative of students having extensive reading demands placed upon them. The results were analyzed and comparisons made. These procedures will be explained in further detail.

Materials Used

For purposes of this study, six paragraphs of approximately 180 words each were taken from two equivalent forms of a test (Smith, 1966). The correlation coefficient for the two forms was .72. The paragraphs had been carefully written to control for grade level and for purpose of reading. Two paragraphs dealt with the understanding of details; two with understanding main ideas; and two with the recognition of sequence. All paragraphs were written at the ninth grade level.

To test for comprehension the cloze procedure developed by Taylor (1953) was used. This technique is named after the gestaltists' principle of closure. In it certain words are deleted from a reading selection on a predetermined basis. The reader must supply the word which belongs in the space. A reader makes closure as he selects the word to fit the context of the selection. In this study every fifth word was deleted. The procedure of deleting every fifth word is based upon research by MacGinitie (1960) which showed that every fifth word could be deleted without increasing the difficulty of the passage. Miller and Coleman (1967) found the cloze procedure to be effective for checking linguistic variables hypothesized to effect difficulty as in this study. Rankin (1965) found that this procedure of deleting every fifth word was more effective in studying the reader's ability to understand the structural meaning than the deletion of only nouns and verbs which is more adequate in testing the substantive knowledge of the subject. A pre-cloze technique was used in this study. With this procedure the reader does not have an opportunity to read the undeleted text first, as opposed to a post-cloze technique in which the reader reads the original text before the cloze version. Taylor (1957) found the pre-cloze technique to be more economical and as effective as the post-cloze technique when groups of subjects were studied. Only the exact deleted words were scored as correct, and not synonyms, as Bormuth (1965a) found this method be be effective and economical for research purposes.

One form of the test was independently rewritten by two graduate students using the simplified verbs. In the few cases in which the writers rewrote the verbs differently, the principle investigator served as a mediator. Thus, there were six paragraphs; three using the simplified

verbs and three using regular verbs. In addition, the order of the paragraphs was systematically altered--half the subjects reading the simplified verb paragraph of a pair first and half of the subjects reading the regular verb paragraph first.

Subjects

Previous research by Bormuth (1965b) on the relationship between cloze test length and the number of subjects for sample size, indicated that approximately forty subjects were needed for a cloze test of the length used in this investigation. To obtain subjects for the study the principle investigator went to the public school system of a large metropolitan city and asked for the name of a school having a ninth grade consisting mainly of Black pupils and considered to be "impoverished". He also went to a suburban school system consisting mainly of White pupils. In both schools he asked to have typical students assigned to the test group. In both schools two intact classes were designated. The materials were administered to each group. Subjects were alloted as much time as needed to complete the exercises. The exercises were scored and percentages of items correct for the total of the simplified verb and the total of the regular verb paragraphs were calculated. Preliminary analysis of the data indicated that the paragraphs appeared to be too difficult for the students in the urban, Black school. A second Black school, less "impoverished", but meeting the criteria for this study, was selected and the procedure repeated. However, the data from all three schools was used in the analysis.

Results

The purpose of this study was to seek answers to two questions. One question was concerned with whether or not material written with simplified verbs, as indicated by the Ogden-Richards lexicon, are easier for Black "culturally different" children to read than material written using regular verbs. The other question concerned the advantages in comprehension of materials written with simplified verbs for the "culturally different" children as compared with other children. The results of this study are represented in the table.

In the first Black school the subjects were able to supply the deleted word 29.06 percent of the time for the simplified verb paragraphs and 24.81 percent of the time for the regular verb paragraphs. Using a test to determine the significance of a difference between the means of two small correlated samples (Smith, 1967), the scores from the two tests were found to be significantly different at the .0005 level of confidence. However, as indicated previously, the exercise was thought to be too difficult for the subjects. A previous study by Bormuth (1967) indicated that subjects should be able to supply the correct word approximately 38 percent of the time for the material to be at the subject's instructural level. Thus, this part of the study was replicated using students from a school thought not to be quite as "impoverished". In this replication the subjects were able to supply the deleted word 35.48 percent of the time for the simplified verb paragraphs and 31.65 percent of the time for the regular verb paragraphs. Although these percentages did not reach the 38 percent level suggested by Bormuth as indicative of appropriate comprehension, they were higher than the percentages

achieved in the previous study. The difference between the percentages correct achieved by subjects in the second replication was significant at the .005 level of confidence.

In the suburban White school subjects were able to supply the deleted word 42.84 percent of the time for the simplified verb paragraphs and 41.68 percent of the time for the regular verb paragraph. The differences of the scores on the two types of paragraphs was significant at the .02 level of confidence. Thus, the differences in percentages correct between the two types of paragraphs was smaller for children from the suburban White school than for the children in either of the two Black schools and the level of confidence was less.

However, statistical significance is not always related to educational importance. High levels of statistical significance may be a function of sample size and refined experimental procedures. Thus, the strength of the statistical association was estimated (Hays, 1963). See table. This analysis indicated that verb simplification accounted for 11.76 percent, 9.22 percent, and 3.58 percent of the variance in Black school I, Black school II, and the White school respectively. These results would seem to indicate that verb simplication would be of greater help in the Black schools than in the White school.

Discussion

The results of this investigation indicate that the children from both the Black "culturally different" urban schools and the White, suburban school found it easier to read paragraphs using simplified verbs than paragraphs using regular verbs. There is an indication that children from the urban Black schools seem to benefit more from

verb simplification than those attending suburban schools. However, these results may be due to poorer readers benefiting more from verb simplification than good readers. This is suggested from the results of the two Black schools. The readers in the second Black school were able to supply the correct deleted words more often than the children in the first Black school; yet the difference in performance between the simplified verb paragraphs and regular verb paragraphs was less. Additional research is required to determine if the children in the Black schools benefited from the verb simplification procedures because the materials were written in a language closer to their dialect or if the benefit would decrease as the material is written on easier levels. Nevertheless, the results of this study indicate that verb simplification is a simple technique for writing materials that increase the comprehension levels of Black "culturally different" students.

TABLE 1

The Difference Between Means of Percentage Scores on Materials Written with Simplified and Regular Verbs

School	Sample Size	Mean Percent Correct		Degrees of Freedom	t-test	Probability	Strength of Association
		Simplified Verbs	Regular Verbs				
Black School I	57	29.06	24.81	56	4.05	.0005	11.76%
Black School II	51	35.48	31.65	50	3.37	.005	9.22%
White School	64	42.84	41.68	63	2.37	.02	3.58%

References

Bormuth, J. R., "Validities of Grammatical and Semantic Classification of Cloze Test Scores," Proceedings of the International Reading Association, 1965a, 10, 283-286.

Bormuth, J. R., "Optimum Sample Size and Cloze Test Length in Readability Measurement," Journal of Educational Measurement, 1965b, 2, 111-116.

Bormuth, J. R., "Readability: A New Approach," Reading Research Quarterly, 1966, 1, 79-132.

Bormuth, J. R., "Comparable Cloze and Multiple Choice Comprehension Test Scores," Journal of Reading, 1967, 10, 291-299.

DeStefano, Johanna S., "Productive Language Differences in Fifth Grade Black Students' Syntactic Forms," Elementary English, in press.

Hays, W. L., Statistics for Psychologists. New York: Holt, Rinehart and Winston, 1963, 327-329.

Loban, W. D., The Language of Elementary School Children, NCTE, Champaign, Illinois, 1963.

MacGinitie, W. H., Contextual Constraint in English Prose. Unpublished doctoral dissertation, Columbia University, 1960.

Mattleman, Marciene S. and Emans, R., "The Language of the Inner-City Child: A Comparison of Puerto Rican and Negro Third Grade Girls," The Journal of Negro Education, 1969, 38, 173-176.

Miller, G. R., and Coleman, E. B., "A Set of Thirty-Six Passages Calibrated for Complexity," Journal of Verbal Learning and Verbal Behavior, 6, 1967, 851-54.

Ogden, C. K. and Richards, I. A., The Meaning of Meaning. Harcourt, Brace and World, Inc.: New York, 1927.

Rankin, Earl F., Jr., "The Cloze Procedure--A Survey of Research," The Philosophical and Sociological Bases of Reading. Fourteenth Yearbook of the National Reading Conference, The National Reading Conference, Inc., Milwaukee, Wisconsin, 1965.

Smith, Helen K., Instruction of High School Students in Reading for Different Purposes, Cooperative Research Project Number 1714. The University of Chicago, 1966.

Smith, G. M., A Simplified Guide to Statistics. Holt, Rinehart and Winston, Inc.: New York, 1967, 84-86.

Taylor, Wilson L., "Cloze Procedure: A New Tool for Measuring Readability," Journalism Quarterly, 30, 1953, 414-438.

Taylor, W. L., "Cloze Readability Scores as Indices of Individual Differences in Comprehension and Aptitude," Journal of Applied Psychology, Vol. 41 (February 1957), 19-26.